

Issuance Date: June 16, 2011
Effective Date: July 1, 2011
Expiration Date: June 30, 2016

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-002447-3

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

City of Spokane Riverside Park Water Reclamation Facility and
Combined Sewer Overflows (CSOs)
4401 N. Aubrey L. White Parkway
Spokane, WA 99205
And
Spokane County (Pretreatment Program)
Division of Utilities – 1026 W. Broadway Ave.
Spokane, WA 99260-0430

<u>Plant Location:</u> 4401 N. Aubrey L. White Parkway; Spokane	<u>Receiving Water:</u> Spokane River
<u>Water Body I.D. No.:</u> WA-54-1020 (old) QZ45UE (new)	<u>Discharge Location:</u> Latitude: 47.695278° N Longitude: 117.473889° W
<u>Plant Type:</u> Activated Sludge	<u>CSO Outfalls:</u> 22 Outfalls

is authorized to discharge in accordance with the special and general conditions that follow.

James M. Bellatty
Water Quality Section Manager
Eastern Regional Office
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.	Discharge Monitoring Report	Monthly	August 15, 2011
S3.E	Noncompliance Notification	As necessary	---
S4.B.	Plans for Maintaining Adequate Capacity	As necessary	---
S4.C.	Notification of New or Altered Sources	As necessary	---
S4.E.	Waste load Assessment	Annually	July 1, 2011
S5.G.	Operations and Maintenance Manual Update	1/permit cycle	December 1, 2014
S6.A.2.	Accidental Spill Plan	1/permit cycle	October 1, 2014
S6.A.5.	Pretreatment Report for City of Spokane	1/year	March 31, 2012
S6.D	Local Limits update	1/permit cycle	October 15, 2012
S6.E	Mercury Control Plan	1/permit cycle	February 1, 2016
S7.A.5.	Pretreatment Report for Spokane County	1/year	May 1, 2011
S7.D	Local Limits update	1/permit cycle	August 15, 2012
S7.E	Mercury Control Plan	1/permit cycle	February 15, 2016
S9.	Spill Plan	1/permit cycle	October 1, 2014
S12.A.2	Toxics Management Plan	Annually	September 15, 2012
S12.B.	QAPP for PCBs, PBDE, Dioxins	1/permit cycle	March 15, 2012
S13.B	Combined Sewer Overflow Report	Annually	October 1, 2011
S13.D	Combined Sewer Overflow Reduction Plan Amendment	As needed	---
S13.E	Combined Sewer Overflow (CSO) Maintenance and Inspection Plan Update	Annually	October 1, 2011
S13.F	CSO Maintenance and Inspection Report	Annually	March 1, 2012
S15.A.	Engineering Report Submission	1/permit cycle	January 3, 2013

Permit Section	Submittal	Frequency	First Submittal Date
S15.B.	Contract Documents submitted for construction of phosphorus removal process units to achieve Final TP effluent limitations	1/permit cycle	June 30, 2014
S15.D	Certificate of Construction and Start up Completion for Compliance with Spokane River and Lake Spokane DO TMDL WLAs	1/permit cycle	March 1, 2018
S16	Regional Toxics Task Force organizational and governing documents.	1/permit cycle	November 30, 2011
S17	Application for Permit Renewal	1/permit cycle	January 1, 2016
G1.	Notice of Change in Authorization	As necessary	---
G4.	Reporting Planned Changes	As necessary	---
G5.	Engineering Report for Construction or Modification Activities	As necessary	---
G21	Reporting Anticipated Non-compliance	As necessary	---
G22	Reporting Other Information	As necessary	---

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

A. Interim Effluent Limitations

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

Low Flow Season (July-Oct) EFFLUENT LIMITATIONS^a: OUTFALL # 005A		
Parameter	Average Monthly	Average Weekly
Biochemical Oxygen Demand (5 day)	30 mg/L, 10,759 lbs/day	45 mg/L, 16,138 lbs/day
Total Suspended Solids	30 mg/L, 10,759 lbs/day	45 mg/L, 16,138 lbs/day
Fecal Coliform Bacteria	200 CFU /100 mL	400 CFU /100 mL
pH ^c	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
Total PCBS	See Section S12.A.2, S16 and footnote f	
Parameter	Average Monthly	Maximum Daily ^b
Total Residual Chlorine	8.5 µg/L, 3.12 lbs/day	22.2 µg/L, 14.26 lbs/day
Total Ammonia (as NH ₃ -N) ^d	3.1 mg/L, 1,112 lbs/day	7.5 mg/L, 2,690 lbs/day
Phosphorus (total as P)	See Note e below	
Cadmium (total recoverable)	0.076 ug/L	0.233 ug/L
Lead (total recoverable)	0.772 ug/L	1.34 ug/L
Zinc (total recoverable)	53.8 µg/L	72.6 µg/L
High Flow Season (Nov-June) EFFLUENT LIMITATIONS^a: OUTFALL # 005A		
Parameter	Average Monthly	Average Weekly
Biochemical Oxygen Demand (5 day)	30 mg/L, 10,759 lbs/day 85% removal of influent BOD	45 mg/L, 16,138 lbs/day
Total Suspended Solids	30 mg/L, 10,759 lbs/day 85% removal of influent TSS	45 mg/L, 16,138 lbs/day
Phosphorus (total as P)	See Note e below	See Note e below
Fecal Coliform Bacteria	200 CFU /100 mL	400 CFU /100 mL
pH ^c	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
Parameter	Average Monthly	Maximum Daily ^b
Total Residual Chlorine	8.5 µg/L, 4.3 lbs/day	22.2 µg/L, 24.0 lbs/day
Cadmium (total)	0.113 ug/L	0.212 ug/L

Lead (total)	0.889 ug/L	1.22 ug/L
Zinc (total)	73.4 µg/L	162 µg/L
a The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
b The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		
c Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly. Continuous for digital equipment means data acquisition every 2 minutes.		
d. There are no ammonia toxicity-based effluent limits when the Spokane River's 7-day average flow is greater than 5000 cfs as measured at the USGS gage at Cochran Street. New information can be cause for modification.		
e Seasonal chemical phosphorus removal must be initiated by no later than April 15, or terminate no earlier than October 15. The monthly average shall be calculated using only the days when chemical removal is required. The monthly average effluent limitation shall be 0.63 mg/L. The average weekly effluent limitation shall be 0.95 mg/L.		
f. The effluent monitoring results for PCBs will be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.		

B. Effluent Limitations for Compliance with the Spokane River DO TMDL

Beginning **March 1, 2018** the Permittee must have installed the full phosphorus removal process train including chemical addition and have operational the technology needed to comply with the following effluent limitations during the season March 1 to October 31. Beginning **March 1, 2021** the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

(March – Oct) EFFLUENT LIMITATIONS^a: OUTFALL # 005A	
Parameter	Seasonal Average Limit Applies March 1 to October 31
Carbonaceous Biochemical Oxygen Demand – 5 day (CBOD ₅) See notes e and f	1778 lbs/day

Total Phosphorus (as P) See notes e and f	17.8 lbs/day	
Parameter	Seasonal Average Limit	
Total Ammonia (as NH ₃ -N) See notes e and f		
For “season” of March 1 to May 31	351 lbs/day	
For “season” of June 1 to Sept. 30	89 lbs/day	
For “season” of Oct. 1 to Oct. 31	351 lbs/day	
Parameter	Average Monthly	Maximum Daily ^b
Total PCBS	See Section S12.A.2, S16 and footnote g	
Total Ammonia (as NH ₃ -N) See notes e and f		
For “season” of June 1 to Sept. 30	---	7.5 mg/L
EFFLUENT LIMITATIONS ^a : OUTFALL # 005A		
Parameter	Average Monthly	Average Weekly
Carbonaceous Biochemical Oxygen Demand – 5 day (CBOD ₅) Nov. 1 thru Feb. ^d	25 mg/L, 8966 lbs/day	40 mg/L, 14,345 lbs/day
Total Suspended Solids ^d	30 mg/L, 10,759 lbs/day	45 mg/L, 16,138 lbs/day
Fecal Coliform Bacteria	200 CFU /100 mL	400 CFU /100 mL
pH ^c	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
Parameter	Average Monthly	Maximum Daily ^b
Total Residual Chlorine	8.5 µg/L, 4.3 lbs/day	22.2 µg/L, 24.0 lbs/day
Cadmium (total)	0.076 ug/L	0.233 ug/L
Lead (total)	0.772 ug/L	1.34 ug/L
Zinc (total)	53.8 µg/L	72.6 µg/L
a. The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
b. The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		
c. Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly.		
d. The given limits of 30 mg/L and 45 mg/L are default values. During data gathering for		

the “Ten Year” assessment performance based limits will be calculated.
e. Compliance with the effluent limitations for CBOD5, NH3-N and TP will be based on: 1) a seasonal average with the running seasonal average for the season reported on monthly for tracking compliance with the allowable mass limitation, and 2) a combining of the effluent quality, pollutant equivalencies in term of oxygen depletion and the DO TMDL and pollutant credit earned from implementation of the Offset Plan, following public review and comment and then Ecology approval.
f. Adjustments to the final effluent based on demonstrated pollutant equivalencies or non bioavailable P will be implemented as major permit modifications requiring public notice and comment.
g. The effluent monitoring results for PCBs will be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.

Footnotes:

The method detection limit (MDL) for Total phosphorus is to provide a reporting limit of 5 µg/L using the method listed in Appendix A or USEPA method 365.3.

The method detection level (MDL) for total ammonia is to provide a reporting limit of 50 µg/L using the method listed in Appendix A.

These QLs will be used for assessment of compliance with these effluent limits. If the Permittee is unable to attain the MDL and QL in its effluent due to matrix effects, the Permittee shall submit a matrix specific MDL and QL to the Department by (nine months after the effective date). The matrix specific MDL and QL shall be calculated as follows:

Report single analytical values below detection as “less than (detection level)” where (detection level) is the numeric value specified in attachment A.

Report single analytical values between the agency-required detection and quantitation levels with qualifier code of j following the value.

To calculate the average value (monthly average):

- Use the reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
- For values reported below detection, use one-half the detection value if the lab detected the parameter in another sample for the reporting period.
- For values reported below detection, use zero if the lab did not detect the parameter in another sample for the reporting period.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix specific MDL and a QL to Ecology with appropriate laboratory documentation.

C. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

The mixing zone dimensional boundary shall be variable as defined by the effluent plume where the percent effluent is equivalent to that calculated from the maximum dilution factor. The dilution factor will be derived based on the maximum fraction of the river flow authorized for acute (2.5%) and chronic (25%) mixing zones at the established critical conditions (seasonal 7Q20). At no time shall the mixing zone cause a loss of sensitive or important habitat, substantially interfere with the existing or characteristic uses of the water body, result in damage to the ecosystem, or adversely affect public health.

The calculated dilution factors at critical conditions are as follows:

Dilution Factors (% effluent = 100 x 1/dil. factor)	Low River Flow Period (July – October)		High River Flow Period (November – June)	
	Acute	Chronic	Acute	Chronic
Aquatic Life	1.17 (85%)	3.96 (25%)	1.23 (81%)	6.40 (16%)
Human Health, Carcinogen	12.75 (8%, annually based)			
Human Health, Non-carcinogen	5.19 (19%, annually based)			

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
Flow, avg., & max	MGD	Raw Sewage	Continuous ²	Metered
		Final Effluent	Continuous ²	Metered
pH, min. & max.	s.u.	Raw Sewage	Continuous ²	Metered
		Final Effluent	Continuous ²	Metered
Temp	°C	Raw Sewage	Daily	Grab
		Final Effluent	Daily	Grab
		Receiving water upstream of outfall and downstream of mixing zone	Continuous June through September	Metered

MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
BOD ₅ ¹ monthly avg., weekly avg., in years 1 to 4 of permit. In fifth year of permit see note 7	mg/L, lbs/day, % removal	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
CBOD ₅ ¹ monthly avg., weekly avg., in year 5 of permit, see note 7	mg/L, lbs/day, % removal	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
TSS	mg/L, lbs/day, % removal	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
Dissolved Oxygen	mg/L	Final Effluent	Daily	Grab
Total Residual Chlorine ³	µg/L, lbs/day	Final Effluent	2/day	Grab
Chlorine Usage	lbs/day	---	Daily	Report
Fecal Coliform	c.f.u./100 mL	Final Effluent	3/week	Grab
Total Nitrogen (TN as N)	mg/L	Raw Sewage Final Effluent	1/week 1/week	24 hour Comp. 24 hour Comp.
Nitrate + Nitrite (NO ₃ +NO ₂ as N)	mg/L	Raw Sewage Final Effluent	1/week 1/week	24 hour Comp. 24 hour Comp.
Total Ammonia (NH ₃ as N), monthly avg., daily max., in years 1 to 4 of permit. In fifth year of permit see notes 7 & 9	mg/L, lbs/day	Raw Sewage Final Effluent	3/week Daily	24 hour Comp. 24 hour Comp.
Alkalinity, (total as CaCO ₃)	mg/L	Final Effluent	3/week	Grab
Total Phosphorus (as P) monthly average and daily max. in years 1 to 4 of permit. In fifth year of permit see notes 7 & 9	ug/l, lbs/day	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
Total Reactive Phosphorus	ug/L	Final Effluent	Daily	24 hour Comp.

MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
Aluminum (Total Recoverable)	µg/L	Raw Sewage Final Effluent	1/2 weeks when using Alum	24 hour Comp.
Arsenic (Total Recoverable) ⁴	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Cadmium (Total Recoverable) ⁴	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Copper (Total Recoverable) ⁴	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Lead (Total Recoverable) ⁴	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Zinc (Total Recoverable) ⁴	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Mercury (Total Recoverable) ⁴	µg/L	Raw Sewage Final Effluent	1/month	24 hour Comp.
Silver (Total Recoverable) ⁴	µg/L	Raw Sewage Final Effluent	1/month	24 hour Comp.
Total PCBs ^{5 & 6}	ng/L	Raw Sewage 2 collection system locations	Once each in July, & once each month for Nov. thru May	24 hour Comp.
Total PCBs ^{5 & 6}	pg/L	Final Effluent	1/quarter	24 hour Comp.
Total PCBs ^{5 & 6}	ng/kg	Biosolids	2/year (winter & summer)	Man. Composite
2,3,7,8, TCDDs ⁶	ng/L	Raw Sewage 2 collection system locations	Once in July, & monthly Nov. thru May	24 hour Comp.
2,3,7,8, TCDDs ⁶	pg/L	Final Effluent	1/quarter	24 hour Comp.
2,3,7,8, TCDDs ⁶	ng/kg	Biosolids	2/year (winter & summer)	Man. Composite
PBDE ^{6 & 10} (polybrominated diphenyl ethers)	ng/L pg/L	Raw Sewage Final Effluent	1/quarter	24 hour Comp.
PBDE ^{6 & 10} (polybrominated diphenyl ethers)	ng/kg	Biosolids	2/year (winter & summer)	Man. Composite
Priority Pollutants ^{4&5}	SEE SPECIAL CONDITION S6.B			
Biomonitoring	SEE SPECIAL CONDITIONS S10 and S11			

MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
CSO Monitoring		SEE SPECIAL CONDITION S12.E.3		

¹ Beginning in the fourth year of the permit, the Permittee shall begin monitoring for BOD₅ and CBOD₅ to establish a correlation of BOD₅ to CBOD₅

² Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken by hourly grab samples when continuous monitoring is not possible.

³ Total Residual Chlorine analyses must use the spectrophotometric DPD method. Lbs reported will express the weight of chlorine added to the effluent.

⁴ For metals see Appendix A for the required detection limit (DL) or quantitation limit (QL).

⁵ For PCBs use EPA method 1668 with a reporting limit or quantitation limit of 10 pg/L per congener. For influent monitoring and source tracing a higher limit can be proposed to Ecology in the QAPP if the higher reporting limit still provides adequate source tracing and identification.

⁶ See permit section S12.

⁷ Beginning March 1, 2018; for the 3 parameters (CBOD₅, NH₃ and TP) with WLAs established by the Spokane River and Lake Spokane DO TMDL, the monthly discharge monitoring report must provide the following information for the “ten year assessment” monitoring and future compliance projections: monthly average, daily maximum, running total for the “season,” running average for the “season,” projected trend of total lbs. and average concentration and average daily lbs. for remainder of the “season” with future compliance target indicated. If the trend projection indicates a significant potential for noncompliance with the allowable mass limitations to be in effect once the period of formal compliance begins in 2021, the Permittee is to communicate the anticipated result of the projection to the Department with appropriate recommendations to correct any trend potentially resulting in noncompliance.

⁸ The reporting limit for Total Ammonia (as N) is 50 ug/L, the analytical protocol is listed in Appendix A of this permit.

⁹ The reporting limit for Total Phosphorus is 5 ug/L, the analytical protocol is listed in Appendix A of this permit.

¹⁰ For PBDEs use draft EPA method 1614 with a reporting limit or quantitation limit of 10 pg/L per congener. For influent monitoring and source tracing a higher limit can be proposed to Ecology in the QAPP if the higher reporting limit still provides adequate source tracing and identification.

Report single analytical values below detection as “less than (detection level)” where (detection level) is the numeric value specified in appendix A of this permit.

Report single analytical values between the agency-required detection and quantitation levels with qualifier code of j following the value.

To calculate the average value (monthly average):

- Use the reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
- For values reported below detection, use one-half the detection value if the lab detected the parameter in another sample for the reporting period.
- For values reported below detection, use zero if the lab did not detect the parameter in another sample for the reporting period.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix specific MDL and a QL to Ecology with appropriate laboratory documentation.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. The Department exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms shall be received by the Department no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than forty-five (45) days following the monitoring period. Unless otherwise specified, all toxicity test data shall be submitted within sixty (60) days after the sample date. The report(s) shall be sent to the Department of Ecology, Eastern Regional Office, 4601 North Monroe, Suite 202, Spokane, Washington 99205-1295.

In addition to the monthly report, a monthly summary report form (EPA No. 3320-1) shall be received no later than the 15th day of the following month.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Department.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the

analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within (30) days after becoming aware of the violation.
2. Immediately notify the Department of the failure to comply.
3. Within 24 hours from the time the Permittee becomes aware of any of the following circumstances, the Permittee must report the noncompliance due to the following circumstances by telephone (and email) to Ecology at 509-329-3400:
 - a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1, above.
 - b. Any unanticipated bypass that exceeds any effluent limit in the permit (See Part S4.B, "Bypass Procedures").
 - c. Any upset that exceeds any effluent limit in the permit (See G.15, "Upset").
 - d. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1 of this permit.
 - e. Any unpermitted overflow prior to the treatment works, whether or not such unpermitted overflow endangers health or the environment or exceeds any effluent limit in the permit. This includes overflows such as from manholes and side sewer laterals due to blockages.
4. Submit a detailed written report to the Department within thirty (30) days (five [5] days for upsets and bypasses listed above in 1 and 2), unless requested earlier by the Department. The report shall contain:
 - a. a description of the noncompliance and its cause;
 - b. the period of noncompliance, including exact dates and times;
 - c. the estimated time noncompliance is expected to continue if it has not been corrected;

- d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
- e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

The Permittee must report all permit violations, which do not require immediate or within 24 hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in paragraph E.3, above.

F. Maintaining a Copy of This Permit

A copy of this permit must be kept at the treatment plant and be made available upon request to the public or Ecology inspectors.

S4. FACILITY LOADING

A. Design Criteria

The flows and waste loadings from approved engineering report for the Spokane Riverside Park Water Reclamation Facility (design year 2015) are shown below. The approved influent flows and loading (also known as the design criteria) shall not be exceeded:

Parameter	Dry Season (May through October)	Wet Season (Nov. through April)
Average flow, MGD	55.9	60.6
Maximum Monthly flow, MGD	59.6	79.8
Maximum Day flow, MGD	103.9	129.5
Peak Hour flow, MGD ⁽¹⁾	130	130
BOD ₅ influent loading, lb./day		
Annual Average	85,100	
Maximum Month	102,120	
Maximum Day	170,200	
TSS influent loading, lb./day		
Annual Average	85,100	
Maximum Month	102,120	
Maximum Day	170,200	
TKN influent loading, lb./day		
Annual Average	16,300	
Maximum Month	19,560	
Maximum Day	32,600	

TP influent loading, lb./day	
Annual Average	2,270
Maximum Month	2,570
Maximum Day	3,630

(1) The capacity of the primary and secondary clarifiers and primary influent piping treatment processes is 100 MGD with four clarifiers in service. The hydraulic capacity of the influent interceptors is 130 MGD. Plans are in development that may result in a peak hydraulic capacity of 150 MGD.

B. Plans for Maintaining Adequate Capacity

The permittee shall submit to the Department a plan and a schedule for continuing to maintain capacity when:

1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three consecutive months; or
2. When the projected increase would reach design capacity within five years, whichever occurs first. If such a plan is required, it shall contain a plan and schedule for continuing to maintain capacity. The capacity as outlined in this plan must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet the objective of maintaining capacity.
 - a. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
 - b. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
 - c. Limitation on future sewer extensions or connections or additional waste loads.
 - d. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
 - e. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment

D. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an approved general sewer plan or approved plans and specifications; or (3) would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)]. .

E. Waste load Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by **July 1, 2011** and annually thereafter. The report shall contain the following:

An indication of compliance or noncompliance with the permit effluent limitations, for TP this assessment shall include a calculation of the coefficient of variation for the season April 1 through October 31;

The report shall provide a statistical analysis of the facility's performance removing total phosphorus, BOD₅, CBOD₅ and ammonia on a monthly average basis, 30 day rolling average basis, seasonal average basis, and seasonal median basis.

A comparison between:

- the existing and design monthly average dry weather flows,
- the existing and design monthly average wet weather flows
- the existing and design peak flows,
- the existing and design BOD₅, mass loading;
- the existing and design total suspended solids loadings, mass loading;
- the existing and design total phosphorus, mass loading and influent concentration;
- the existing and design total ammonia, mass loading and influent concentration.

Also, the percentage increase in the above parameters since the last annual report.

The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above.

The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

S5. OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Certified Operator

An operator certified for at least a Class IV plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class III plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for the entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of its obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes.

The Permittee shall maintain Reliability Class II (EPA 430/9-74-001) at the wastewater treatment plant, which requires a backup power source sufficient to operate all vital

components and critical lighting and ventilation during peak wastewater flow conditions, except vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but shall be sufficient to maintain the biota.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

This permit prohibits a bypass, which is the intentional diversion of waste streams from any portion of a treatment facility. The Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

2. Bypass which is unavoidable, unanticipated and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
- c. The Department is properly notified of the bypass as required in condition S3E of this permit.

3. Bypass which is anticipated and has the potential to result in noncompliance of this permit

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

G. Operations and Maintenance Manual

The approved Operations and Maintenance Manual shall be kept available at the treatment plant and all operators shall follow the instructions and procedures of this manual.

An Operations and Maintenance (O&M) Manual update shall be prepared by the Permittee in accordance with WAC 173-240-080 and be submitted to the Department for approval **by December 1, 2014** and annually thereafter as additional upgrades and improvements are made. The Permittee shall confirm this review by letter to the Department. Substantial changes or updates to the O&M Manual shall be submitted to the Department whenever they are incorporated into the manual.

In addition to requirements of WAC 173-240-080 (1) through (5) the O&M Manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Wastewater system maintenance procedures that contribute to the generation of process wastewater
3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (e.g. defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
4. Safety provisions through design feature and safety procedures provided by operational considerations and periodic training classes. This includes fail safe features for sludge digestion facilities, chlorination facilities, and other chemical storage and handling facilities.
5. The treatment plant process control monitoring schedule and control systems.

S6. PRETREATMENT (CITY OF SPOKANE)

A. General Requirements

1. The Permittee (City of Spokane) shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved pretreatment program submittal entitled "Industrial Pretreatment Program" dated September 30, 1987; any approved revisions thereto; and the General Pretreatment Regulations (40 CFR Part 403). The Ordinance section containing the local limits was last updated March 31, 2003.

A meeting was held on October 20, 2004 at the Department of Ecology Eastern Regional Office on the subject of Spokane-area pretreatment. The Department of Ecology, City of Spokane, Spokane County, and the City of Spokane Valley agreed that the City of Spokane has the authority to administer its delegated Pretreatment program to their present and future sewer customers located within their designated sewer service areas in City of Spokane Valley, in Spokane County, and in the City of Spokane. For the purpose of this permit and pretreatment program delegation, this applies to the present and future sewer customers who contribute wastewater into the City of Spokane sewer collection system and are located either within or outside of the corporate limits of the City of Spokane. This applies to Brenntag Pacific in the City of Spokane Valley, and Johanna Beverages, Reliance Trailer, and Goodrich in the West Plains Area of Spokane County no later than July 31, 2013. The City acknowledges that as owner and operator of a wastewater collection system and POTW it is their responsibility to protect their infrastructure, and accepts the obligations of a Delegated Pretreatment Program.

Both the City of Spokane and Spokane County, as the control authority for their Delegated Pretreatment Programs, will continue to enforce and update, if necessary and appropriate, their interlocal agreements and/or multijurisdictional pretreatment agreement with “contributing” jurisdictions such as Millwood, Liberty Lake, and Airway Heights. Some of these actions may include conducting Industrial User Surveys, monitoring, and permitting commercial and/or industrial users.

At a minimum, the following pretreatment implementation activities shall be undertaken by the Permittee:

- a. Enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Federal Clean Water Act (hereinafter, the Act), prohibited discharge standards as set forth in 40 CFR 403.5, local limitations specified in Section 13.03.0416 of Chapter 13.03 of the Spokane Municipal Code, or state standards, which ever are most stringent or apply at the time of issuance or modification of a local industrial waste discharge permit. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Act and shall not be limited to categorical industrial facilities.
- b. Issue industrial waste discharge permits to all significant industrial users [SIUs, as defined in 40 CFR 403.3(v)] contributing to the treatment system, including those from other jurisdictions. Industrial waste discharge permits shall contain as a minimum, all the requirements of 40 CFR 403.8 (f)(1)(iii). The Permittee shall coordinate the permitting process with the Department regarding any industrial facility, which may possess a state waste discharge permit issued by the Department. Once issued, an industrial waste discharge permit will take precedence over a state-issued waste discharge permit.
- c. Maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by industrial users to the POTW. Records shall be maintained for at least a three-year period.

- d. Perform inspections, surveillance, and monitoring activities on industrial users to determine and/or confirm compliance with applicable pretreatment standards and requirements. A thorough inspection of SIUs shall be conducted annually. Frequency of regular local monitoring of SIU wastewaters shall normally be commensurate with the character and volume of the wastewater but shall not be less than once per year. Sample collection and analysis shall be performed in accordance with 40 CFR Part 403.12(b)(5)(ii)-(v) and 40 CFR Part 136.
- e. Enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements. Once violations have been identified, the Permittee shall take timely and appropriate enforcement action to address the noncompliance. The Permittee's action shall follow its enforcement response procedures and any amendments, thereof.
- f. Publish, at least annually in a newspaper of general circulation in the Permittee's service area, a list of all nondomestic users which, at any time in the previous 12 months, were in significant noncompliance as defined in 40 CFR 403.8(f)(2)(viii) through 40 CFR 403.8(f)(2)(viii)(H).
- g. If the Permittee elects to conduct sampling of an SIU's discharge in lieu of requiring user self-monitoring, it must satisfy all requirements of 40 CFR Part 403.12. This includes monitoring and record keeping requirements of Sections 403.12(g) and (o). For SIUs subject to categorical standards (CIUs), the Permittee may either complete baseline and initial compliance reports for the CIU (when required by 403.12(b) and (d)) or require these of the CIU. The Permittee must ensure that it provides SIUs the results of sampling in a timely manner, inform SIUs of their right to sample, their obligations to report any sampling they do, to respond to non-compliance, and to submit other notifications. These include a slug load report (403.12(f)), notice of changed discharge (403.12(j)), and hazardous waste notifications (403.12(p)). If sampling for the SIU, the Permittee must not sample less than once in every six-month period unless the Permittee's approved program includes procedures for reduction of monitoring for Middle-Tier or Non-Significant Categorical Users per 403.12(e)(2) and (3) and those procedures have been followed.
- h. Develop and maintain a data management system designed to track the status of the Permittee's industrial user inventory, industrial user discharge characteristics, and compliance status.
- i. Maintain adequate staff, funds, and equipment to implement its pretreatment program.
- a. Establish, where necessary, legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by commercial or industrial users within these jurisdictions. These agreements must identify the agency responsible to perform the various implementation and enforcement activities in the contributing jurisdiction. In addition, the Permittee must develop Multi-Jurisdictional Agreements that outlines the specific roles, responsibilities, and pretreatment activities of each jurisdiction.

2. The Permittee shall review, change if necessary, and submit to the Department for approval by **October 1, 2014**; an updated Accidental Spill Prevention Program. The program, as approved by the Department, shall include a schedule for implementation, and shall become an enforceable part of these permit conditions.
3. The Permittee must evaluate any new designated Significant Industrial User within one year of designation for a plan or other action to control Slug Discharges and also in accordance with 40 CFR 403.8(f)(1)(iii)(B)(6), 40 CFR 403.8(f)(2)(vi) and 40 CFR 403.8(f)(2)(vi)(A)-(D).
4. The Permittee must evaluate at a minimum whether or not each Significant Industrial User needs a plan to control slug discharges. For purposes of this section, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge. The Permittee must make the results of this evaluation available to Ecology upon request. If the Permittee decides that a slug control plan is needed, the plan must contain, at a minimum, the following elements:
 - a. Description of discharge practices, including non-routine batch discharges.
 - b. Description of stored chemicals.
 - c. Procedures for immediately notifying the Permittee of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days.
 - d. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response.
5. Pretreatment Report

Each Pretreatment Program Permittee shall provide to the Department an annual report that briefly describes its program activities during the previous calendar year. This report shall be submitted no later than March 31 of each year to:

Washington Department of Ecology,
Eastern Regional Office,
4601 North Monroe Street,
Spokane, WA 99205-1295.

The report shall include the requirements listed in 40 CFR 403.12(h)(i)(1)-(5) and the following additional information:

- a. An updated nondomestic inventory (Industrial User Survey).
- b. Results of wastewater sampling at the treatment plant as specified in **S6.B**. The Permittee shall calculate removal rates for each pollutant and evaluate the

adequacy of the existing local limitations in Section 13.03.0416 of Ordinance 13.03 in prevention of treatment plant interference, pass through of pollutants that could affect receiving water quality, and sludge contamination.

c. Status of program implementation, including:

- (1) Any substantial modifications to the pretreatment program as originally approved by the Department, including staffing and funding levels.
- (2) Any interference, upset, or permit violations experienced at the POTW that are directly attributable to wastes from industrial users.
- (3) Listing of industrial users inspected and/or monitored, and a summary of the results.
- (4) Listing of industrial users scheduled for inspection and/or monitoring for the next year, and expected frequencies.
- (5) Listing of industrial users notified of promulgated pretreatment standards and/or local standards. Indicate which industrial users are on compliance schedules and the final date of compliance for each.
- (6) Listing of industrial users issued industrial waste discharge permits.
- (7) Planned changes in the pretreatment program implementation plan. (See subsection S6.A.6. below.)

d. Status of compliance activities, including:

- (1) Listing of industrial users that failed to submit baseline monitoring reports or any other reports required under 40 CFR 403.12 and in the Permittee's current Industrial Pretreatment program Enforcement Response Plan and Industrial Sampling and Monitoring Guidance Manual.
- (2) Listing of industrial users that were at any time during the reporting period not complying with federal, state, or local pretreatment standards or with applicable compliance schedules for achieving those standards, and the duration of such noncompliance.
- (3) Summary of enforcement activities and other corrective actions taken or planned against noncomplying industrial users. The Permittee shall supply to the Department a copy of the public notice of facilities that were in significant noncompliance.

e. Local Limits updates and any other updates specified in S6.C and S6.D.

B. Monitoring Requirements

The Permittee must:

1. Monitor its influent, effluent, and sludge for the priority pollutants identified in Tables II and III of Appendix D of 40 CFR Part 122 as amended, any compounds identified because of Condition S6.B.4, and any other pollutants expected from non-domestic sources using U.S. EPA-approved procedures for collection, preservation, storage, and analysis. Section S2 (Monitoring Requirements) in a few instances requires a more sensitive quantitation or reporting limit than appendix A. When required the requirements of S2 are to control monitoring and reporting requirements.
2. Test influent, effluent, and sludge samples for the priority pollutant metals (Table III, 40 CFR 122, Appendix D) on a quarterly basis throughout the term of this permit.
3. Test influent, effluent, and sludge samples for the organic priority pollutants (Table II, 40 CFR 122, Appendix D) on an annual basis. The Permittee may use the data collected for application purposes using Appendix A test methods to meet this requirement.
4. Sample POTW influent and effluent on a day when industrial discharges are occurring at normal-to-maximum levels.
5. Obtain 24-hour composite samples for the analysis of acid and base/neutral extractable compounds and metals.
6. Collect grab samples at equal intervals for a total of four grab samples per day for the analysis of volatile organic compounds. The laboratory may run a single analysis for volatile pollutants (Method 624) for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than 1 ml of each grab included in the composite.
7. Ensure that all reported test data for metals represents the total amount of the constituents present in all phases, whether solid, suspended, or dissolved elemental or combined, including all oxidation states unless otherwise indicated.
8. Handle, prepare, and analyze all wastewater samples taken for GC/MS analysis in accordance with the U.S. EPA Methods 624 and 625 (October 26, 1984).
9. Collect a sludge sample concurrently with a wastewater sample as a single grab of residual sludge. Sludge organic priority pollutant sampling and analysis must conform to U.S. EPA Methods 624 and 625 unless the Permittee requests an alternate method and Ecology has approved. Sludge metals priority pollutant sampling and analysis must conform to U.S. EPA SW 846 6000/7000 Series Methods unless the Permittee requests an alternate method and Ecology has approved.
10. Collect grab samples for cyanide, phenols, and oils. Measure hexane soluble oils (or equivalent) only in the influent and effluent.
11. Make a reasonable attempt to identify all other substances and quantify all pollutants shown to be present by gas chromatograph/mass spectrometer (GC/MS) analysis per 40 CFR 136, Appendix A, Methods 624 and 625, in addition to

quantifying pH, oil and grease, and all priority pollutants.

The Permittee should attempt to make determinations of pollutants for each fraction, which produces identifiable spectra on total ion plots (reconstructed gas chromatograms). The Permittee should attempt to make determinations from all peaks with responses 5% or greater than the nearest internal standard. The 5% value is based on internal standard concentrations of 30 µg/l, and must be adjusted downward if higher internal standard concentrations are used or adjusted upward if lower internal standard concentrations are used. The Permittee may express results for non-substituted aliphatic compounds as total hydrocarbon content.

12. Use a laboratory whose computer data processing programs are capable of comparing sample mass spectra to a computerized library of mass spectra, with visual confirmation by an experienced analyst.
13. Conduct additional sampling and appropriate testing to determine concentration and variability, and to evaluate trends for all detected substances determined to be pollutants.

C. Reporting of Monitoring Results

The Permittee shall include a summary of monitoring results in the Annual Pretreatment Report.

D. Local Limit Update

By **October 15, 2012**, the Permittee shall, in consultation with the Department, reevaluate and update their local limits in order to prevent pass through or interference. The Permittee should refer to EPA's Local Limits Development Guidance dated July 2004. The Permittee should also consider Total Toxic Organics, Phosphorus, metals, and conventional pollutants in their revised local limits. Upon determination by the Department that any pollutant present causes pass through or interference, or exceeds established sludge standards, the Permittee shall establish new local limits or revise existing local limits as required by 40 CFR 403.5. In addition, the Department may require revision or establishment of local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the Water Quality Standards, Sediment Standards, or established effluent limits, or causes whole effluent toxicity. The determination by the Department shall be in the form of an Administrative Order.

The Department may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures pursuant to state and federal law and regulation.

E. Mercury Control Plan

The Permittee shall revise and submit to the Department of Ecology an updated Mercury abatement and control plan. The plan shall be expanded as the Department of Ecology develops and releases further guidance. The Mercury Control Plan shall be submitted to the Department of Ecology by **February 1, 2016**.

Mercury Plan development guidance can be found at the following locations:

Ecology mercury web site <http://www.ecy.wa.gov/mercury/>

For Dental Plan guidance <http://www.ecy.wa.gov/dentalbmps/index.html>

Reduction plan guidance <http://www.ecy.wa.gov/biblio/0303001.html>

S7. PRETREATMENT (SPOKANE COUNTY)

A. General Requirements

1. The Permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved pretreatment program submittal entitled "Industrial Pretreatment Program" and updated on February 5, 2001; any approved revisions thereto; and the General Pretreatment Regulations (40 CFR Part 403). The Ordinance section containing the local limits was last updated October 1, 2009.

A meeting was held on October 20, 2004 at the Department of Ecology Eastern Regional Office on the subject of Spokane-area pretreatment. The Department of Ecology, City of Spokane, Spokane County, and the City of Spokane Valley agreed that Spokane County has the authority to administer its Delegated Pretreatment Program to their present and future sewer customers located within their designated sewer service areas in Spokane County and in the City of Spokane Valley. For the purpose of this permit and pretreatment program delegation, this applies to customers who contribute wastewater into the Spokane County sewer collection system and are located outside of the corporate limits of the City of Spokane and within the City of Spokane Valley and Spokane County. Existing permitted facilities that this applies to, Ecolite, Galaxy Compound Semiconductors, Lloyd Industries, Honeywell, Kemira Water Solutions, American On-Site Services and Novation in the City of Spokane Valley, and the Mica Landfill in Spokane County. The County acknowledges that as owner and operator of a wastewater collection system it is their responsibility to protect their infrastructure, and by agreement the infrastructure of the downstream POTW, and accepts the obligations of a Delegated Pretreatment Program.

Both the City of Spokane and Spokane County, as the control authority for their Delegated Pretreatment Programs, will continue to enforce and update, if necessary and appropriate, their interlocal agreements and/or multijurisdictional pretreatment agreement with "contributing" jurisdictions such as Millwood, the City of Spokane Valley and the City of Spokane. Some of these actions will include conducting Industrial User Surveys, monitoring, and permitting commercial and/or industrial users.

At a minimum, the following pretreatment implementation activities shall be undertaken by the Permittee:

- a. Enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Federal Clean Water Act (hereinafter, the Act), prohibited

discharge standards as set forth in 40 CFR 403.5, local limitations specified in Section 08.03A.0204 of Ordinance 8.03A, or state standards, which ever are most stringent or apply at the time of issuance or modification of a local industrial waste discharge permit. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Act and shall not be limited to categorical industrial facilities.

- b. Issue industrial waste discharge permits to all significant industrial users [SIUs, as defined in 40 CFR 403.3(v)] contributing to the treatment system, including those from other jurisdictions. Industrial waste discharge permits shall contain as a minimum, all the requirements of 40 CFR 403.8 (f)(1)(iii). The Permittee shall coordinate the permitting process with the Department regarding any industrial facility, which may possess a state waste discharge permit issued by the Department. Once issued, an industrial waste discharge permit will take precedence over a state-issued waste discharge permit.
- c. Maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by industrial users to the POTW. Records shall be maintained for at least a three-year period.
- d. Perform inspections, surveillance, and monitoring activities on industrial users to determine and/or confirm compliance with applicable pretreatment standards and requirements. A thorough inspection of SIUs shall be conducted annually. Frequency of regular local monitoring of SIU wastewaters shall normally be commensurate with the character and volume of the wastewater but shall not be less than once per year. Sample collection and analysis shall be performed in accordance with 40 CFR Part 403.12(b)(5)(ii)-(v) and 40 CFR Part 136.
- e. Enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements. Once violations have been identified, the Permittee shall take timely and appropriate enforcement action to address the noncompliance. The Permittee's action shall follow its enforcement response procedures and any amendments, thereof.
- f. Publish, at least annually in a newspaper of general circulation in the Permittee's service area, a list of all nondomestic users which, at any time in the previous 12 months, were in significant noncompliance as defined in 40 CFR 403.8(f)(2)(viii) through 40 CFR 403.8(f)(2)(viii)(H).
- g. If the Permittee elects to conduct sampling of an SIU's discharge in lieu of requiring user self-monitoring, it must satisfy all requirements of 40 CFR Part 403.12. This includes monitoring and record keeping requirements of Sections 403.12(g) and (o). For SIUs subject to categorical standards (CIUs), the Permittee may either complete baseline and initial compliance reports for the CIU (when required by 403.12(b) and (d)) or require these of the CIU. The Permittee must ensure that it provides SIUs the results of sampling in a timely manner, inform SIUs of their right to sample, their obligations to report any

sampling they do, to respond to non-compliance, and to submit other notifications. These include a slug load report (403.12(f)), notice of changed discharge (403.12(j)), and hazardous waste notifications (403.12(p)). If sampling for the SIU, the Permittee must not sample less than once in every six-month period unless the Permittee's approved program includes procedures for reduction of monitoring for Middle-Tier or Non-Significant Categorical Users per 403.12(e)(2) and (3) and those procedures have been followed.

- h. Develop and maintain a data management system designed to track the status of the Permittee's industrial user inventory, industrial user discharge characteristics, and compliance status.
 - i. Maintain adequate staff, funds, and equipment to implement its pretreatment program.
 - j. Establish, where necessary, legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by commercial or industrial users within these jurisdictions. These agreements must identify the agency responsible to perform the various implementation and enforcement activities in the contributing jurisdiction. In addition, the Permittee must develop Multi-Jurisdictional Agreements that outlines the specific roles, responsibilities, and pretreatment activities of each jurisdiction.
- 2. The Permittee shall review, change if necessary, and submit to the Department for approval by **October 1, 2014**; an updated Accidental Spill Prevention Program. The program, as approved by the Department, shall include a schedule for implementation, and shall become an enforceable part of these permit conditions.
- 3. The Permittee must evaluate any new designated Significant Industrial User within one year of designation for a plan or other action to control Slug Discharges and also in accordance with 40 CFR 403.8(f)(1)(iii)(B)(6), 40 CFR 403.8(f)(2)(vi) and 40 CFR 403.8(f)(2)(vi)(A)-(D).
- 4. The Permittee must evaluate at a minimum whether or not each Significant Industrial User needs a plan to control slug discharges. For purposes of this section, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge. The Permittee must make the results of this evaluation available to Ecology upon request. If the Permittee decides that a slug control plan is needed, the plan must contain, at a minimum, the following elements:
 - a. Description of discharge practices, including non-routine batch discharges.
 - b. Description of stored chemicals.
 - c. Procedures for immediately notifying the Permittee of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days.
 - d. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker

training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response.

5. Pretreatment Report

Each Pretreatment Program Permittee shall provide to the Department an annual report that briefly describes its program activities during the previous calendar year. This report shall be submitted no later than May 1 of each year to:

Washington Department of Ecology,
Eastern Regional Office,
4601 North Monroe Street,
Spokane, WA 99205-1295.

The report shall include the requirements listed in 40 CFR 403.12(h)(i)(1)-(5) and the following additional information:

- a. An updated nondomestic inventory (Industrial User Survey).
- b. Results of wastewater sampling at the treatment plant as specified in **S7.B**. The Permittee shall calculate removal rates for each pollutant and evaluate the adequacy of the existing local limitations in Section 8.03A.0204 of Ordinance 08.03A in prevention of treatment plant interference, pass through of pollutants that could affect receiving water quality, and sludge contamination.
- c. Status of program implementation, including:
 - (1) Any substantial modifications to the pretreatment program as originally approved by the Department, including staffing and funding levels.
 - (2) Any interference, upset, or permit violations experienced at the POTW that are directly attributable to wastes from industrial users.
 - (3) Listing of industrial users inspected and/or monitored, and a summary of the results.
 - (4) Listing of industrial users scheduled for inspection and/or monitoring for the next year, and expected frequencies.
 - (5) Listing of industrial users notified of promulgated pretreatment standards and/or local standards. Indicate which industrial users are on compliance schedules and the final date of compliance for each.
 - (6) Listing of industrial users issued industrial waste discharge permits.
 - (7) Planned changes in the pretreatment program implementation plan. (See subsection S7.A.6. below.)

d. Status of compliance activities, including:

- (1) Listing of industrial users that failed to submit baseline monitoring reports or any other reports required under 40 CFR 403.12 and in accordance with the Permittee's current pretreatment program.
- (2) Listing of industrial users that were at any time during the reporting period not complying with federal, state, or local pretreatment standards or with applicable compliance schedules for achieving those standards, and the duration of such noncompliance.
- (3) Summary of enforcement activities and other corrective actions taken or planned against noncomplying industrial users. The Permittee shall supply to the Department a copy of the public notice of facilities that were in significant noncompliance.

e. Local Limits updates and any updates specified in S7.C and S7.D.

B. Monitoring Requirements

The Permittee must:

1. Monitor its influent, effluent, and sludge for the priority pollutants identified in Tables II and III of Appendix D of 40 CFR Part 122 as amended, any compounds identified because of Condition S6.B.4, and any other pollutants expected from non-domestic sources using U.S. EPA-approved procedures for collection, preservation, storage, and analysis. Section S2 (Monitoring Requirements) in a few instances requires a more sensitive quantitation or reporting limit than appendix A. When required the requirements of S2 are to control monitoring and reporting requirements.
2. Test influent, effluent, and sludge samples for the priority pollutant metals (Table III, 40 CFR 122, Appendix D) on a quarterly basis throughout the term of this permit.
3. Test influent, effluent, and sludge samples for the organic priority pollutants (Table II, 40 CFR 122, Appendix D) on an annual basis. The Permittee may use the data collected for application purposes using Appendix A test methods to meet this requirement.
4. Sample POTW influent and effluent on a day when industrial discharges are occurring at normal-to-maximum levels.
5. Obtain 24-hour composite samples for the analysis of acid and base/neutral extractable compounds and metals.
6. Collect grab samples at equal intervals for a total of four grab samples per day for the analysis of volatile organic compounds. The laboratory may run a single analysis for volatile pollutants (Method 624) for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than 1 ml of each grab included in the composite.

7. Ensure that all reported test data for metals represents the total amount of the constituents present in all phases, whether solid, suspended, or dissolved elemental or combined, including all oxidation states unless otherwise indicated.
8. Handle, prepare, and analyze all wastewater samples taken for GC/MS analysis in accordance with the U.S. EPA Methods 624 and 625 (October 26, 1984).
9. Collect a sludge sample concurrently with a wastewater sample as a single grab of residual sludge. Sludge organic priority pollutant sampling and analysis must conform to U.S. EPA Methods 624 and 625 unless the Permittee requests an alternate method and Ecology has approved. Sludge metals priority pollutant sampling and analysis must conform to U.S. EPA SW 846 6000/7000 Series Methods unless the Permittee requests an alternate method and Ecology has approved.
10. Collect grab samples for cyanide, phenols, and oils. Measure hexane soluble oils (or equivalent) only in the influent and effluent.
11. Make a reasonable attempt to identify all other substances and quantify all pollutants shown to be present by gas chromatograph/mass spectrometer (GC/MS) analysis per 40 CFR 136, Appendix A, Methods 624 and 625, in addition to quantifying pH, oil and grease, and all priority pollutants.

The Permittee should attempt to make determinations of pollutants for each fraction, which produces identifiable spectra on total ion plots (reconstructed gas chromatograms). The Permittee should attempt to make determinations from all peaks with responses 5% or greater than the nearest internal standard. The 5% value is based on internal standard concentrations of 30 µg/l, and must be adjusted downward if higher internal standard concentrations are used or adjusted upward if lower internal standard concentrations are used. The Permittee may express results for non-substituted aliphatic compounds as total hydrocarbon content.

12. Use a laboratory whose computer data processing programs are capable of comparing sample mass spectra to a computerized library of mass spectra, with visual confirmation by an experienced analyst.
13. Conduct additional sampling and appropriate testing to determine concentration and variability, and to evaluate trends for all detected substances determined to be pollutants.

C. Reporting of Monitoring Results

The Permittee shall include a summary of monitoring results in the Annual Pretreatment Report.

D. Local Limit Update

By **August 15, 2012**, the Permittee shall, in consultation with the Department, reevaluate and update their local limits in order to prevent pass through or interference. The permittee should refer to EPA's Local Limits Development Guidance dated July 2004. The permittee should also consider Total Toxic Organics, Phosphorus, metals, and conventional pollutants in their revise local limits. Upon determination by the

Department that any pollutant present causes pass through or interference, or exceeds established sludge standards, the Permittee shall establish new local limits or revise existing local limits as required by 40 CFR 403.5. In addition, the Department may require revision or establishment of local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the Water Quality Standards, Sediment Standards, or established effluent limits, or causes whole effluent toxicity. The determination by the Department shall be in the form of an Administrative Order.

The Department may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures pursuant to state and federal law and regulation.

E. Mercury Abatement and Control Plan

The Permittee shall revise and submit to the Department of Ecology an updated Mercury Abatement and Control Plan. The plan shall be expanded as the Department of Ecology develops and releases further guidance. The Mercury Control Plan shall be submitted to the Department of Ecology by **February 15, 2016**.

Mercury Plan development guidance can be found at the following locations:

Ecology mercury web site	http://www.ecy.wa.gov/mercury/
For Dental Plan guidance	http://www.ecy.wa.gov/dentalbmeps/index.html
Reduction plan guidance	http://www.ecy.wa.gov/biblio/0303001.html

S8. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

S9. SPILL PLAN

The Permittee shall by October 1, 2014 submit to the Department an update to the existing Spill Control Plan. The Permittee shall review the plan at least annually and update as needed. Changes to the plan shall be sent to the Department. The Plan and any supplements shall be followed throughout the term of the permit.

The updated Spill Control Plan shall include the following:

- A description of operator training to implement the Plan.
- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

- A list of all oil and petroleum products, materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or other materials which may become pollutants or cause pollution upon reaching state's waters.
- Plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section may be submitted.

S10. ACUTE TOXICITY

A. Effluent Testing Requirements

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. The two species listed below shall be used on each sample and the results submitted to the Department as a part of the permit renewal application process. The Permittee shall conduct acute toxicity testing on a series of five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. The percent survival in 100% effluent shall also be reported.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA-821-R-02-012).
2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA-821-R-02-012).

B. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test in order to determine dose response. Whenever a dilution series is used, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S11. CHRONIC TOXICITY

A. Effluent Testing Requirements

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All of the chronic toxicity tests listed below shall be conducted on each sample. The results of this chronic toxicity testing shall be submitted to the Department as a part of the permit renewal application process.

The Permittee shall conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. This series of dilutions shall include the acute critical effluent concentration (ACEC). The ACEC equals 85% effluent. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following species and the most recent version of the following protocols:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	<i>Pimephales promelas</i>	EPA/600/4-91/002
Water flea	<i>Ceriodaphnia dubia</i>	EPA/600/4-91/002
Alga	<i>Selenastrum capricornutum</i>	EPA/600/4-91/002

B. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples or grab samples. Samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S12. RECEIVING WATER AND EFFLUENT STUDY

A. General Requirements

The Permittee shall conduct analyses of the receiving water and the wastewater facility's influent and effluent samples as listed in permit section S2 and collected in accordance with protocols, monitoring requirements and QA/QC procedures specified in this section.

Raw sewage from the collection system and headworks and effluent samples must be analyzed for:

1. PCBs, 2,3,7,8 TCDDs and PBDE at the locations and at the minimum frequencies listed in the schedule in S2.
2. A report of the results with attached laboratory data sheets shall be submitted to Ecology (ERO Water Quality Program permit manager and the urban waters staff) annually. After each year of sampling for PCBs; 2,3,7,8 TCDDs and PBDE; the permittee and Ecology (ERO Water Quality Program permit manager and the urban waters staff) will review the data, including pattern analysis of homologs, detection limits, QA/QC procedures and a draft action plan (The Toxics Management Plan) listing identified sources, potential sources suggested by data analysis and future source identification activities. Annually the permittee and Ecology will confer and revise the locations and frequency of the raw sewage sampling in the collection system for these pollutants.

The Toxics Management Plan must address source control and elimination of PCBs from:

Contaminated soils and sediments,
Storm water entering the wastewater collection system,
Industrial and commercial sources,

As an element of the pretreatment program, the City and County will expand the scope of their inspections and monitoring to include PCBs and other toxics as appropriate. Monitoring should follow the QAPP the RPWRF lab is developing.

By means of eliminating active sources such as,

Older mechanical machinery
Older electrical equipment and components,
Construction material content such as paints and caulking,
Commercial materials such as ink and dyes,

By means of changing city procurement practices and ordinances control and minimize toxics, including preferential use of PCB free substitutes for those products containing PCBs below the regulated level of 5 ppm, in sources such as:

Construction material content such as paints and caulking
Commercial materials such as ink and dyes,
Soaps and cleaners,

The City (individually or in collaboration with other dischargers) must also prepare public media educating the public about the difference between products free of PCBs and those labeled non-PCB but which contain PCBs below the TOSCA regulatory threshold of 5 ppm.

The effluent monitoring results shall be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.

The goals of the Toxics Management Plan are:

- to reduce toxicant loadings, including PCBs, to the Spokane River to the maximum extent practicable realizing statistically significant reductions in the influent concentration of toxicants to the Riverside Park Water Reclamation Facility over the next 10 years.
- Reduce PCBs in the effluent to the maximum extent practicable to bring the Spokane River into compliance with applicable water quality standards for PCBs.

3. Temperature per the schedule in S2.

B. Protocols

PCBs, 2,3,7,8 TCDDs and PBDE sampling and analysis shall be in accordance with the quality assurance plan and scope of work submitted to the Department of Ecology. The Permittee's quality assurance plan can use the quality assurance plan of Ecology's Urban Toxics Team for a starting point and submit the City's draft for review and approval no later than **March 15, 2012**. The quality assurance plan will be reviewed annually and revised if needed.

Temperature must be monitored using micro-recording temperature devices known as thermistors. Ecology's Quality Assurance Project Plan Development Tool (*Continuous Temperature Sampling Protocols for the Environmental Monitoring and Trends*) contains protocols for continuous temperature sampling. This document is available online at <http://www.ecy.wa.gov/programs/eap/qa/docs/QAPPtool/Mod6%20Ecology%20SOPs/Protocols/ContinuousTemperatureSampling.pdf>. Calibration as specified in this document is not required if the Permittee uses recording devices which are certified by the manufacturer. Ecology does not require manufacture-specific equipment as given in this document, however, if the Permittee wishes to use measuring devices from

another company the accuracy must be demonstrated to be equivalent. The recording devices must be set to record at one-half hour intervals.

The Quality Assurance Project Plan for temperature has been submitted for review and approval.

C. Quality Assurance/Quality Control Procedures

The Permittee must conduct all sampling and analysis in accordance with the guidelines given in *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, Ecology Publication 04-03-030 (<http://www.ecy.wa.gov/pubs/0403030.pdf>).

S13. COMBINED SEWER OVERFLOWS

A. Discharge Locations

The following is a list of combined sewer overflows (CSOs), which are occasional point sources of pollutants as a result of precipitation events. Discharges from these sites are prohibited except as a result of and during precipitation events. No authorization is given by this permit for discharge from a CSO that causes adverse impacts that threaten characteristic uses of the receiving water as identified in the Water Quality Standards, Chapter 173-201A WAC.

OUTFALL NUMBER	OVERFLOW STRUCTURE & REGULATOR LOCATION DESCRIPTION	OUTFALL LOCATION REFERENCE
Spokane River Discharges (North Bank)		
002	A.L. White @ Hartley (extended)	0.5 miles downstream of WWTP
006	Kiernan @ NW Blvd	0.25 miles upstream of WWTP
007	Columbia Circle @ Downriver Drive	0.4 miles upstream of WWTP
010	Cochran @ Buckeye	At Downriver Bridge
012	Nora @ Pettet Dr	0.55 miles Upstream of T.J. Meenach Bridge
014	Sherwood @ Summit	2.0 miles upstream of T.J. Meenach Bridge
015	Ohio @ Nettleton	2.5 miles upstream of T.J. Meenach Bridge
Discharges to Spokane River (South Bank)		
016	“A” @ Linton – Geiger	1.45 miles downstream of Monroe St Dam
Discharges to Hangman Creek		
019	Seventh @ Inland Empire Way	At High Bridge (East Side)
020	High Drive between 33 rd & 37 th	2.65 miles upstream of Avista Bridge
Discharges to Spokane River (South Bank)		

OUTFALL NUMBER	OVERFLOW STRUCTURE & REGULATOR LOCATION DESCRIPTION	OUTFALL LOCATION REFERENCE
022	Main @ Oak	0.7 miles downstream at Monroe St. Dam
Discharges to Spokane River (North Bank)		
023	Cedar @ Ide	0.3 miles downstream of Monroe St. Dam
Discharges to Spokane River (South Bank)		
024	Cedar @ Riverside (2)	0.3 miles downstream of Monroe St. Dam
025	Cedar @ Main	0.3 miles downstream of Monroe St. Dam
026	Lincoln @ Spokane Falls Blvd	At Monroe St. Bridge
033	Fifth @ Arthur Third @ Perry Third @ Arthur First @ Arthur	0.15 miles upstream of J. Keefe Bridge
034	Crestline @ Riverside	At Trent Bridge
038	Magnolia @ S. Riverton	0.15 miles upstream of Mission
039	Altamont @ S. Riverton	0.75 miles downstream of Greene
040	Regal @ S. Riverton	0.25 miles downstream of Greene
Discharge to Spokane River (North Bank)		
041	Rebecca @ Upriver Dr	0.5 miles upstream of Greene
Discharge to Spokane River (South Bank)		
042	Surro Dr.	1.1 miles upstream of Greene St.

B. Combined Sewer Overflow Report

The Permittee shall submit annually a CSO Report to the Department for review and approval, which complies with the performance standards of WAC 173-245 and must include documentation of compliance with the Nine Minimum Controls for CSOs described in Section S13.C.

The performance standard will apply to all CSO outfalls which have been identified by the Permittee in the CSO Reduction Plan Amendment as meeting the “greatest reasonable reduction.” The performance standard is derived from the State regulatory requirements as specified in WAC 173-245-020(22). The performance standard for controlled CSOs is not more than one discharge event per year on average. Compliance with the performance standard will be based on a 20-year moving averaging period, including past years and the current year. When the period of data collection is less than 20 years, the averaging period will include all past years for which flow monitoring data was collected. The Permittee must report the average number of discharge events per controlled outfall per year based on a 20-year moving average to be reported in the annual report. Compliance with the performance standard is determined annually.

C. Nine Minimum Controls

In accordance with Chapter 173-245 WAC and US EPA CSO control policy (59 FR 18688), the Permittee must implement and document the following nine minimum controls (NMC) for CSOs. Compliance with the NMC must be documented in the annual CSO Annual Report as required above.

The Permittee must comply with the following technology-based requirements. The Permittee must:

1. Implement proper operation and maintenance programs for the sewer system and all CSO outfalls to reduce the magnitude, frequency, and duration of CSOs. The program must consider regular sewer inspections; sewer, catch basin, and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections.
2. Implement procedures that will maximize use of the collection system for wastewater storage that can be accommodated by the storage capacity of the collection system in order to reduce the magnitude, frequency, and duration of CSOs.
3. Review and modify, as appropriate, its existing pretreatment program to minimize CSO impacts from the discharges from nondomestic users.
4. Operate the POTW treatment plant at maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency, and duration of CSOs. The Permittee must deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW.
5. Dry weather overflows from CSO outfalls are prohibited. The Permittee must report each dry weather overflow to the permitting authority as soon as it becomes aware of the overflow. When it detects a dry weather overflow, the Permittee must begin corrective action immediately and inspect the dry weather overflow each subsequent day until it has eliminated the overflow.
6. Implement measures to control solid and floatable materials in CSOs.
7. Implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters.
8. Implement a public notification process to inform the citizens of when and where CSOs occur. The process must include (a) mechanism to alert persons of the occurrence of CSOs and (b) a system to determine the nature and duration of conditions that are potentially harmful for users of receiving waters due to CSOs.
9. Monitor CSO outfalls to characterize CSO impacts and the efficacy of CSO controls. This must include collection of data that it will use to document the existing baseline conditions, evaluate the efficacy of the technology-based controls, and determine the baseline conditions upon which it will base the long-term control plan. This data must include:

- a) Characteristics of the combined sewer system including the population served by the combined portion of the system and locations of all CSO outfalls in the CSS.
- b) Total number of CSO events and the frequency and duration of CSOs for a representative number of events.
- c) Locations and designated uses of receiving water bodies.
- d) Water quality data for receiving water bodies.
- e) Water quality impacts directly related to CSO (for example, beach closing, floatables, wash-up episodes, fish kills).

D. Combined Sewer Overflow Reduction Plan

The Permittee shall submit, as necessary, an amendment of its CSO Reduction Plan to the Department for review and approval. The amendment shall comply with the requirements of WAC 173-245-090(2). Annually, in October, the City shall submit a progress report of the progress made implementing the CSO Reduction Plan. The progress report shall list the status of planning, design and construction activities for each CSO. The report will include discussion of problems identified that have the delay completion of a project and how the problem(s) will or could be resolved.

E. CSO Maintenance and Inspection Plan

The Permittee shall submit annually (beginning **October 1, 2011**) for review and approval a plan for the following calendar year to maintain the operation, monitoring and function of the remaining CSOs. The plan shall include inspection protocols based on lessons learned to ensure the CSOs are functioning as intended and that public safety and protection of the environment as ensured to the best extent possible.

F. CSO Maintenance and Inspection Report

The Permittee shall submit annually (beginning **March 1, 2012**) for review a progress report covering the previous calendar year, on visual and other inspection made of all CSOs including diversion weirs manhole and other potential structural features that could result in unmonitored CSO discharges. The report shall include a listing and brief description of corrections made. Corrective actions are to include training and updated construction contract language for work of city infrastructure that could result in damage or release of water or sewage to a sewer collection system.

G. CSO Compliance Schedule

In order to achieve the greatest reasonable reduction of combined sewer overflows at the earliest possible date, the City shall implement all portions of the approved CSO reduction plan and amendments dated December 4, 1998, March 10, 2000 and any subsequent amendments as approved by Ecology. The following elements of the approved combined sewer overflow reduction plan shall be accomplished in accordance with the following schedule of milestone dates.

1. Implementation of the approved schedule shall begin immediately.

2. No later than **December 31, 2017**, any discharge of CSO shall meet all final State and Federal requirements applicable to such discharges.
3. Continue CSO discharge monitoring as approved in the October 28, 2008 amendments or subsequent Department of Ecology approved changes to the monitoring plan.
4. The City shall continue the use of and the maintenance of its public notification system ensuring that the public receives adequate notification of CSO occurrences and CSO impacts whether due to weather events or dry weather conditions. The elements of the system includes but is not limited to the following:
 - a) Posting of public notice signs in conspicuous locations near each CSO outfall and at locations used by river recreationists with pertinent information.
 - b) A mechanism to alert persons using all receiving water bodies affected by CSOs during and following CSO events.
 - c) A system to determine the nature and duration of conditions that are potentially harmful to users of the receiving water bodies due to CSOs.

In the third year of the permit, the permittee shall meet with the Department of Ecology and the Health District to review the current public awareness and education plan and revise as appropriate. The public awareness and education plan shall include information and education on the sources and significance of bacteria and other pollutants in the river and what citizens can do to protect the city's wastewater collection system and the river.

5. The City must to the maximum extent possible use native plants in restoration of riparian zone at CSO project sites within the regulated shoreline of the river. If it isn't possible to employ native plants the City must consultant with the Department as the plant to be used.
6. The City must to the maximum extent possible use native plants in creation of "Storm Gardens" and similar means of reducing flows to CSOs. If it isn't possible to employ native plants the City must consultant with the Department as the plant to be used.

H. Wet Weather Operation of Wastewater Treatment Facility.

CSO-related bypass of the secondary treatment portion of the Riverside Park Water Reclamation Facility is authorized when the instantaneous flow rate to the WWTP exceeds the storage capacity of the primary clarifiers as a result of precipitation events. Bypasses that occur when the instantaneous flow rate is less than primary clarifiers storage capacity are not authorized under this condition and are subject to the bypass provisions as stated in S5.F of the permit. In the event of a CSO-related bypass authorized under this condition, the Permittee must minimize the discharge of pollutants to the environment. At a minimum, CSO-related bypass flows must receive solids and floatables removal, primary clarification,

and disinfection. The final discharge must at all times meet the effluent limits of this permit as listed in S1.

The Permittee must maintain records of all CSO-related bypasses at the treatment plant. These records must document the date, duration, and volume of each bypass event, and the magnitude of the precipitation event. The records must also indicate the effluent flow rate at the time when bypassing is initiated. All occurrences of bypassing must be reported on a monthly and annual basis. The monthly report must include the above information and must be included in narrative form with the discharge monitoring report. The annual report must include all of the above information in summary format and should be reported in the annual CSO report per S13.

S14. RECLAMATION AND REUSE

A. Reclamation and Reuse Pilot and Demonstration Projects

When the permittee proposes a small scale pilot project for demonstration of concept and feasibility the permittee shall submit an engineering report (following the requirements of WAC 173-240 and WAC 173-219, once adopted) describing the project. The report must describe the project with appropriate design and operational detail and must be submitted to both the Departments of Health and Ecology for review and approval. The permittee will maintain communications with the Departments of Health and Ecology and assist them in providing oversight of the concept and project feasibility and possible long term implementation.

B. Reclaimed Water Limitations (Reserved for Future Use)

C. Reclaimed Water Monitoring Requirements (Reserved for Future Use)

D. Reclamation and Reuse Implementation

For long term implementation of reclamation and reuse pilot projects, this permit will be reopened and modified as necessary to provide special conditions related to reclamation and reuse as provided by permit General Condition G3.B.3.

The permittee shall prepare a water reuse plan, which contains a summary description of the proposed water reuse system as described in the approved Engineering Report. The plan and an application for permit modification shall be submitted to the Departments of Health and Ecology at least 180 days before the reclamation and reuse project becomes operational. The engineering report and reuse plan shall meet the requirements of the state of Washington's "Water Reclamation and Reuse Standards (1997)" and be approved by both the Departments of Health and the Department of Ecology prior to the construction or modification of facilities for producing reclaimed water.

The Permittee shall review the plan at least annually and the plan shall be updated whenever new uses or users are added to the distribution system. A copy of the revised plan shall be submitted to Ecology and Health. The plan shall contain, but not be limited to, the following:

1. Description of the reuse distribution system;
2. Identification of uses, users, location of reuse sites.
3. Evaluation of reuse sites, estimated volume of reclaimed water use, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts.

E. Bypass Prohibited

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass storage lagoon or discharged to an authorized wastewater outfall.

The Departments of Ecology and Health shall be notified by telephone within 24 hours of any diversion to a bypass storage lagoon or authorized outfall. Substandard wastewater shall not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology.

F. Reliability

The Permittee shall maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

1. Alarms and standby power source
2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.
3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

G. Use Area Responsibilities

1. A standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.
2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area. The incidental discharge of reclaimed water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water.

3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department of Ecology or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.
4. Where the reclaimed water production, distribution and use areas are under direct control of the permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

H. Service and Use Area Agreement

Where the reclaimed water additional treatment, distribution system or use area is not under direct control of the permittee:

1. The person(s) who provides additional treatment, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this Permit.
2. Reclaimed water uses, including runoff and spray, shall be confined to the designated and approved use areas. The incidental discharge of reclaimed water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water.
3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This agreement must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997. A copy of each Service and Use Area Agreement must be submitted to and approved by the Departments of Health and Ecology prior to implementation.
4. The Service and Use Area Agreement shall provide the Permittee with authority to terminate service of reclaimed water to a customer violating the State Water Reclamation and Reuse Standards and restrictions outlined in the Service and Use Area Agreement. The Service and Use Area Agreements shall be approved by the Departments of Health and Ecology prior to the distribution of any reclaimed water.
5. No reclaimed water shall be distributed by the Permittee without a reclaimed water service and use agreement approved by the Departments of Health and Ecology.

I. Reclaimed Water Ordinance

The Permittee shall complete a local ordinance to include policies and procedures for the distribution and delivery of reclaimed water. The ordinance shall provide the Permittee with the authority to terminate service of reclaimed water from any customer

violating the state Water Reclamation and Reuse Standards and restrictions outlined in the service and use agreement.

J. Irrigation Use

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water shall be determined based on a detailed water balance analysis. The calculated loading rate(s) and the parameters and methods used to determine the loading rate(s) shall be submitted to the Washington Department of Ecology for approval.
2. There shall be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved use agreement.
3. There shall be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.
4. The reclaimed water shall not be applied to the irrigation lands in quantities that:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Cause long-term anaerobic conditions in the soil.
 - c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.
 - d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee shall inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

S15. COMPLIANCE SCHEDULE

The following compliance schedule is to implement the Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load (TMDL), its waste load allocations and the Managed Implementation Plan. The Department acknowledges that, depending on how the environment responds to these actions the model results coming out of the “10 year assessment” may yield revised final equivalent effluent limitations (see Section 303(d)(4)(A) of the Clean Water Act).

The Department also acknowledges that the following schedule may need to be amended in the future. Any request must be based on new information including progress made and appropriate justification. Any modification to the compliance schedule would be made pursuant to 40 CFR 122.62 or 122.63, as appropriate.

A. Engineering Report Update

No later than **January 3, 2013**, two copies of an approvable Engineering Report must be prepared by the Permittee in accordance with WAC 173-240 and submitted to the Department for review and approval.

The Engineering Report must address the wastewater treatment processes needed to reliably comply with the CBOD₅, NH₃ and TP WLAs of the Spokane River and Lake Spokane Dissolved Oxygen TMDL, provide site options and piping and process options for future addition of process elements to achieve the final equivalent effluent limitations and water reclamation requirements as described in Chapter 173-219 WAC "Reclaimed Water Use."

The Engineering Report is to address the following topics based on rule requirements, pollutant equivalency consideration, potential for offset creation and management including trading, etc:

- 1) population projections by year for the next 20 years,
- 2) loading projections, flow, TP, CBOD, Ammonia, and TN;
- 3) wastewater treatment processes needed to reliably comply with the CBOD₅, NH₃ and TP WLAs of the Spokane River and Lake Spokane Dissolved Oxygen TMDL; including loadings potentially bypassed in a "blending event," and requiring an offset or pollutant equivalency consideration;
- 4) projection of loading removed for TP, CBOD, Ammonia, and TN;
- 5) projection of offset(s) and other actions needed for compliance with DO TMDL that reduce TP, CBOD and ammonia loadings to the final effluent and the river,
- 6) options considered to generate offset(s),
- 7) recommended offset option and/or other actions (such as water reclamation and offset generating options if projected to be needed)
- 8) timeline of offsets and other DO compliance actions to be needed and implementation schedule to achieve DO TMDL compliance,
- 9) site options and process options for future addition of process elements and offset generating activities to achieve the final equivalent effluent limitations and water reclamation requirements as described in Chapter 173-219 WAC "Reclaimed Water Use."
- 10) establish a ratio of total phosphorus (TP) to total reactive phosphorus (TRP) and a ratio of total reactive phosphorus (TRP) to bio-available phosphorus.
- 11) findings from the University of Washington / WERF bioavailability lab study.
- 12) subsequent monitoring and modeling of bioavailable phosphorus impacts in Lake Spokane.
- 13) the pounds of phosphorus that are not bio-available, not reactive and not a nutrient source that contribute to the total phosphorus waste load allocation
- 14) recommended adjustment potentially made to the effluent limitations needed for compliance with the DO TMDL because of non bio-available phosphorus in the effluent,
- 15) The plan update, in combination with the pollutant reduction from technology, shall provide reasonable assurance of meeting the Permittee's Waste Load Allocations in ten (10) years.

- 16) Update analysis of CSO control options and no feasible alternative option for expansion of the treatment facilities to avoid “blending” of fully treated effluent and partially treated effluent during CSO events.

B. Project Manual (Plans and Specifications)

No later than **June 30, 2014** the Permittee shall submit to the Department for review and approval two copies of approvable plans and specifications in accordance with WAC 173-240 for upgrade of the existing wastewater treatment facility to meet the interim TP effluent limitations.

C. Construction Quality Assurance Plan

Prior to the start of construction, the Permittee shall submit to the Department a quality assurance plan as required by WAC 173-240.

D. Verification of Construction and Start up Completion for Compliance with Spokane River and Lake Spokane DO TMDL

No later than **March 1, 2018** the Permittee must submit a verification that the selected technology(s) have been installed and are optimally functional and ready to comply with the effluent limitations presented in permit conditions S1.B and be continuously operating.

S16. Regional Toxics Task Force

The permittee must participate in a cooperative effort to create a Regional Toxics Task Force and participate in the functions of the Task Force. The Task Force membership should include NPDES permittees in the Spokane River basin, conservation and environmental interests, the Spokane Tribe, Spokane Regional Health District, Ecology, and other appropriate interests. The goal of the Task Force will be to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal it is anticipated that the Task Force functions will include:

- (1) Identify data gaps and collect necessary data on PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
- (2) Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
- (3) Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River;
- (4) Review proposed Toxic Management Plans, Source Management Plans, and BMPs;
- (5) Monitor and assess the effectiveness of toxic reduction measures;
- (6) Identify a mutually agreeable entity to serve as the clearinghouse for data, reports, minutes, and other information gathered or developed by the Task Force

and its members. This information shall be made publically available by means of a website and other appropriate means;

To discharge these functions the Task Force may:

- Provide for an independent community technical advisor funded by the permittees, who shall assist in review of data, studies, and control measures, as well as assist in providing technical education information to the public;

By **November 30, 2011**, the permittee shall provide Ecology with the details of the organizational structure, specific goals, funding mechanism and the governing documents of the Regional Toxics Task Force.

If Ecology determines the Task Force is failing to make measureable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

S17. APPLICATION FOR PERMIT RENEWAL

The Permittee shall submit an application for renewal of this permit by **January 1, 2016**.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

- A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to the Department.
 - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - 1. Violation of any permit term or condition.
 - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - 3. A material change in quantity or type of waste disposal.
 - 4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
 - 5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
 - 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 - 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:

1. A material change in the condition of the waters of the state.
2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.
6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.
2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit.

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G15. UPSET

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G16. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G17. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G18. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this

Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G20. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Department.

G21. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

G22. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

APPENDIX A

EFFLUENT CHARACTERIZATION FOR POLLUTANTS THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)

The following table specifies analytical methods and levels to be used for effluent characterization in NPDES and State waste discharge permits. This appendix specifies effluent characterization requirements of the Department of Ecology unless other methods are specified in the body of this permit.

This permit specifies the compounds and groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objective of this appendix is to reduce the number of analytical “non-detects” in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
CONVENTIONALS			
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3- GH		0.3 mg/L
Flow	Calibrated device		
Dissolved oxygen	4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro-recording devices known as thermistors		0.2° C
pH	SM4500-H ⁺ B	N/A	N/A
NONCONVENTIONALS			
Total Alkalinity	SM2320-B		5 mg/L as CaCo3
Chlorine, Total Residual	4500 Cl G		50.0
Color	SM2120 B/C/E		10 color unit
Fecal Coliform	SM 9221D/E, 9222	N/A	N/A
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	4500-NO3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)	4500-NH3-C/E/FG		300
Ortho-Phosphate (PO ₄ as P)	4500- PE/PF	3	10

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Phosphorus, Total (as P)	4500-PE/PF	3	10
Oil and Grease (HEM)	1664A	1,400	5,000
Salinity	SM2520-B		3 PSS
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO ₄)	SM4110-B		200
Sulfide (as mg/L S)	4500-S ² F/D/E/G		200
Sulfite (as mg/L SO ₃)	SM4500-SO3B		2000
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	2340B		200 as CaCO ₃
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
Tin, Total (7440-31-5)	200.8	0.3	1.5
METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	2	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	2	10
Phenols, Total	EPA 420.1		50
DIOXIN			
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L
VOLATILE COMPOUNDS			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toulene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0
ACID COMPOUNDS			
2-Chlorophenol (95-57-8)	625	1.0	2.0
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0
2,4 dinitrophenol (51-28-5)	625	1.0	2.0
2-Nitrophenol (88-75-5)	625	0.5	1.0
4-nitrophenol (100-02-7)	625	0.5	1.0
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
Pentachlorophenol (87-86-5)	625	0.5	1.0
Phenol (108-95-2)	625	2.0	4.0
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(a)anthracene (56-55-3)	625	0.3	0.6
Benzo(j)fluoranthene (205-82-3)	625	0.5	1.0
Benzo(r,s,t)pentaphene (189-55-9)	625	0.5	1.0
Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0
3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6
11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
Dibenzo (a,i)acridine (224-42-0)	610M/625M	2.5	10.0
Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
3-Methyl cholanthrene (56-49-5)	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
Perylene (198-55-0)	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6
PESTICIDES/PCBs			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9)	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05 ¹⁰
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9)	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2)	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.